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| Atty. Docket No. DP-302459 | Serial No. 09/881,641 |
| Applicant Foster, et al. | |
| Filing Date June 14, 2001 | Group |

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U.S. PATENT DOCUMENTS

| Exam. Init. | Document Number | Date | Name | Class | Sub Class | Filing Date (if approp.) |
|-------------|-----------------|------------|------------------|-------|-----------|--------------------------|
| | 3,450,617 | 06/17/1969 | Hellund, E.L. | | | 08/22/1966 |
| | 3,541,379 | 11/17/1970 | Holden, C. B. | | | 09/11/1967 |
| | 3,979,193 | 09/07/1976 | Sikich | | | 11/29/1974 |
| | 4,695,358 | 09/22/1987 | Mizuno, et al. | 204 | 174 | 11/08/1985 |
| | 4,795,617 | 01/03/1989 | O'Hare | 422 | 186.15 | 01/16/1984 |
| | 4,813,231 | 03/21/1989 | Bykowski | 60 | 274 | 10/07/1987 |
| | 4,945,721 | 08/07/1990 | Cornwell, et al. | 60 | 274 | 04/14/1988 |
| | 5,044,157 | 09/03/1991 | Henkel | 60 | 274 | 10/13/1989 |

FOREIGN PATENT DOCUMENTS

| Document Number | Date | Country | Class | Subclass | Translation Yes No |
|-----------------|----------|---------------|-------|----------|----------------------|
| DE3708508 | 16.03.87 | Germany | | | NO |
| GB2274412 | 14.12.93 | Great Britain | | | |
| CN1027828C | 95.01.08 | China | | | YES |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| Louis A. Rosocha; Los Alamos National Laboratory; *Nonthermal Plasma Applications to Pollution Control and Environmental Remediation*; First International Conference on Advanced Oxidation Technologies for Water and Air Remediation; London, Ontario, Canada, June 25-30, 1994.

| Wachsman, Eric; Palitha Jayaweera; Victor L.K. Wong; Jon G. McCarty; Gopala Krishnan; Angel Sanjurjo; *Solid-Oxide Electrochemical Reduction and Selective Absorption of NO_x*; Proceedings of the 1995 Diesel Engine Emissions Reduction Workshop, San Diego California, July 24-27, 1995; U.S. Department of Energy.

Examiner

| Date Considered

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|-------------|-----------------|------------|----------------|-------|-----------|--------------------------|
| | 5,141,714 | 08/25/1992 | Obuchi, et al. | 422 | 174 | 07/31/1990 |
| | 5,147,516 | 09/15/1992 | Mathur, et al. | 204 | 177 | 07/19/1990 |
| | 5,155,994 | 10/20/1992 | Muraki, et al. | 60 | 275 | 01/21/1992 |
| | 5,236,672 | 08/17/1993 | Nunez, et al. | 422 | 186.04 | 12/18/1991 |
| | 5,240,575 | 08/31/1993 | Mathur, et al. | 204 | 177 | 01/23/1992 |
| | 5,324,492 | 06/28/1994 | Masuda, et al. | 423 | 235 | 07/22/1992 |
| | 5,419,123 | 05/30/1995 | Masters | 60 | 274 | 03/17/1994 |
| | 5,427,747 | 06/27/1995 | Kong, et al. | 422 | 186 | 06/08/1994 |

FOREIGN PATENT DOCUMENTS

| Document Number | Date | Country | Class | Subclass | Translation Yes No |
|-----------------|------------|---------|-------|----------|-------------------------|
| JP63242323 | 1988.10.07 | Japan | | | NO |
| JP4276167 | 1992.10.01 | Japan | | | YES |
| JP6015143 | 1994.01.25 | Japan | | | NO |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Huang, Shih-feng; Satoshi Ihara; Masashi Ishimine; Saburoh Satoh; Chobei Yamabe; *Reduction of NO_x by a DC Positive Streamer Reactor with a Wire-to-Plane Electrodes*; Report of the Faculty of Science and Engineering, Saga University, Vol. 25, 1997; p 27-31.

Hammer, Thomas; Stefan Broer; 982428; *Plasma Enhanced Selective Catalytic Reduction of NO_x for Diesel Cars*; Copyright 1998 Society of Automotive Engineers, Inc. p. 7-12.

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|-------------|-----------------|------------|--------------------|-------|-----------|--------------------------|
| | 5,440,876 | 08/15/1995 | Bayliss, et al. | 60 | 274 | 12/15/1993 |
| | 5,458,748 | 10/17/1995 | Breault, et al. | 204 | 177 | 09/20/1993 |
| | 5,492,678 | 02/20/1996 | Ota, et al. | 422 | 174 | 07/20/1994 |
| | 5,603,893 | 02/18/1997 | Gundersen, et al. | 422 | 22 | 08/08/1995 |
| | 5,695,619 | 12/09/1997 | Williamson, et al. | 204 | 165 | 05/25/1995 |
| | 5,746,984 | 05/05/1998 | Hoard | 422 | 169 | 06/28/1996 |
| | 5,843,383 | 12/01/1998 | Williamson, et al. | 422 | 186.04 | 05/30/1997 |
| | 5,746,051 | 05/05/1998 | Kieser, et al. | 60 | 275 | |

FOREIGN PATENT DOCUMENTS

| Document Number | Date | Country | Class | Subclass | Translation Yes No |
|-----------------|------------|---------|-------|----------|----------------------|
| JP6099031 | 1994.04.12 | Japan | | | NO |
| JP6106025 | 1994.04.19 | Japan | | | NO |
| JP6178914 | 1994.06.28 | Japan | | | NO |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Hoard, John; M. Lou Balmer; 982429; *Analysis of Plasma-Catalysis for Diesel NO_x Remediation*; Copyright 1998 Society of Automotive Engineers, Inc.; p. 13-19.

McLarnon, C.R.; V.K. Mathur; University of New Hampshire, *Nitrogen Oxide Decomposition by Barrier Discharge*; 1999 Diesel Engine Emissions Reduction Workshop, Maine Maritime Academy, Castine, Maine, July 5-9, 1999; IV-73-IV-78.

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|-------------|-----------------|------------|----------------|-------|-----------|--------------------------|
| | 6,253,544 | 07/03/2001 | Miller, et al. | 60 | 275 | 10/07/1999 |
| | 6,264,899 | 07/24/2001 | Caren, et al. | 422 | 186.3 | 03/01/2000 |
| | | | | | | |
| | | | | | | |

FOREIGN PATENT DOCUMENTS

| Document Number | Date | Country | Class | Subclass | Translation Yes No |
|-----------------|------------|---------|-------|----------|----------------------|
| JP6182150 | 1994.07.05 | Japan | | | NO |
| JP6269635 | 1994.09.27 | Japan | | | NO |
| JP486974A | | Japan | | | YES |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| Kupe, J.; Delphi Automotive Systems; *Non-Thermal Plasma Emission System for Diesel Exhaust After Treatment*; 1999 Diesel Engine Emissions Reduction Workshop; Maine Maritime Academy, Castine Maine, July 5-9, 1999; IV-29-64.

| Hemingway, Mark D.; Dave Goulette; Gene Ripley; Tom Thoreson; Joachim Kupe; Darrell Herling; Suresh Baskaran; Monty Smith; Del Lessor and Jud Virden; 1999-01-3639 *Evaluation of a Non-Thermal Plasma System for Remediation of NO_x in Diesel Exhaust*; Copyright 1999, Society of Automotive Engineers, Inc.; p. 59-65.

| Hammer, Thomas; Tetsuo Kishimoto; Hans Miessner; Rolf Rudolph; 1999-01-3632; *Plasma Enhanced Selective Catalytic Reduction: Kinetics of NO_x-Removal and Byproduct Formation*; Copyright 1999 Society of Automotive Engineers, Inc. p. 1-7.

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|-------------|-----------------|----------|---------------------|-------|----------|-------------|----|
| | | | | | | Yes | No |
| | 0043477A2 | 20.06.81 | [EPO] Germany | | | | NO |
| | 0585047A2 | 18.08.93 | [EPO] Great Britain | | | | |
| | EP0840838B1 | 18.07.96 | [EPO] Germany | | | | NO |
| | WO94/06543 | 31.03.94 | [PCT] Germany | | | | NO |
| | WO99/18333 | 15.04.99 | [PCT] United States | | | | |
| | WO00/04989 | 03.02.00 | [PCT] United States | | | | |
| | WO00/50743 | 31.08.00 | [PCT] United States | | | | |
| | WO00/43469 | 27.07.00 | [PCT] United States | | | | |
| | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| Roth, Greg; Jim Rush; Vic Nowak; Mike Tyle; 2000-01-1845; *A Compact and Robust Corona Discharge Device (CDD™) for Generating Non-Thermal Plasma in Automotive Exhaust*; Copyright 2000 CEC and SAE International; p. 21-34.

| Herling, Darrell; Monty Smith, Mark Hemingway, David Goulette, Tom Silvis; 2000-01-2899; *Evaluation of Corona Reactors of Several Geometries for a Plasma Assisted Nitrogen Oxide Emission Reduction Device*; Copyright 2000, Society of Automotive Engineers, Inc. p. 49-58.

| Fisher, Galen B; Craig L DiMaggio; Aleksey Yezerets; Mayfair C. Kung; Harold H. Kung; Suresh Baskaran; John G. Frye; Monty R. Smith; Darrell R. Herling; William J. LeBarge; Joachim Kupe; 2000-01-2965 *Mechanistic Studies of the Catalytic Chemistry of NO_x in Laboratory Plasma-Catalyst Reactors*; Copyright 2000 Society of Automotive Engineers, Inc. p. 79-87.

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